

CRM

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CRM Coming Attractions

We are happy to present this second issue of *CRM* in its revised format. Initial response to the new look has been positive and the editor hopes there will be more feedback—with offers of articles. In the last issue we listed some topics that will be covered this year. Other topics for which we are seeking articles are listed below. If you are interested in writing on these subjects, please contact the editor. In addition, we have several theme issues planned for later this year—**historic landscapes, heritage preservation in Indian tribes and Alaska Native groups, Pearl Harbor anniversary, National Register program commemoration of the 25th anniversary of the National Historic Preservation Act**—and another CRM training directory.

Watch for our new departments, **Tribal News, State News, and Local News**, and feel free to contribute (and comment on their usefulness).

Future Topics

Interpreting cultural resources

75th anniversary of the National Park Service

Public awareness of archeology

Use of volunteers and interns

Impact on cultural resources from public events

Partnerships in Preservation: Arizona at Work

Shereen Lerner

Arizona has a long and varied history, going back thousands of years to the settlement of the area by Native Americans, through the exploration by the Spanish, the expansion of settlers coupled with "mining fever" during the 1800s and early 1900s through to the present. In a sense, Arizona is still in a settlement expansionist mode; the recent census indicates that for the past 40 years Arizona has been the second fastest growing state in the Union with a recent population increase of greater than 20%. Despite this population growth, Arizona remains a rural state with more than 75% of the incorporated municipalities boasting populations of fewer than 10,000.

We also live in a state where less than 20% of the land is in private ownership. The government (Federal, state, county and other municipalities) controls the majority of the remainder of the land base with some 20 Indian tribes controlling the remaining acreage in the state. As a result of the high percentage of nonprivately owned land, it has been imperative that we develop partnerships among the various land holders to ensure the protection and preservation of our cultural heritage. In addition, with the presence of many Indian tribes and a strong belief by most long-term residents that Arizona is one of the last remaining frontiers, there is a need to balance the concerns reflected by different cultural backgrounds and strong proponents of individual and private property rights. As a result of the mixed signals we often receive about the value of our state's cultural heritage, it has been our philosophy that preservation of the past is accomplished not only by saving the physical remnants of previous cultures and settlers, but also through education stressing the value of learning about the past.

The cultural resources that represent the various eras of settlement in Arizona are as diverse as the history they represent. We estimate that there are more than 100,000 prehistoric archeological sites across the state and more than 20,000 historic properties. Of these, less than 50% have been recorded. As a result of the continued high population growth occurring in the state, many of the resources are under threat of development or damage as people move into previously unpopulated areas or redevelop populated areas.

Over the past few years we have focused on several significant preservation issues and have formed partnerships with different entities in developing solutions. In combating archeological site vandalism, we have developed the Site Steward program which involves local, state, Federal and tribal participation. Cooperatively with tribes, private citizens and statewide nonprofit preservation organizations we were successful in passing legislation to protect human remains and funerary objects discovered on private lands. Again, cooperatively with tribes and archeologists, legislation passed allowing for the repatriation of remains to culturally affiliated groups. With the current fiscal crisis in the state, our historic property tax credit was in danger and we were successful in working with citizens and preservation groups to ensure its continued existence. In conjunction with the private sector and city governments, we are currently studying options for financial incentives for commercial properties. One of the most important events over the past year was the passage of the Arizona Heritage Fund, a ballot proposition that was the result of the efforts of a coalition of over 100 natural and cultural conservation groups led by the Nature Conservancy. Finally, we continue to work with groups around the state in our public programming (Archeology Week, Preservation Week). More than 30 communities participate in these activities which highlight the value of the preservation of our cultural resources. This essay will discuss each of these topics.

Site Stewards

Recognizing that prehistoric and historic archeological materials are irreplaceable national cultural resources, the Site Steward program was designed to prevent the further destruction of those resources through archeological site monitoring. The program is an organization of volunteers, sponsored by the public land managers of Arizona and tribal governments, whose members are selected, trained and certified by the State Historic Preservation Office (SHPO) and the Archaeology Advisory Commission. The current participants in the program include the SHPO; Bureau of Land Management; the U.S. Forest Service; the Arizona Land Department; Arizona State Parks; the Hopi Tribe; Maricopa and Pima Counties' Parks and Recreation Departments and the City of Phoenix Parks, Recreation and Library Departments. We are in the process of adding new partners to the program. Currently, more than 350 stewards statewide participate in the program, monitoring more than 200 archeological sites. The program is coordinated by a volunteer working within the SHPO. When full-time staff is hired to coordinate the program we are confident it will expand significantly, thereby affording even greater protection to our heritage resources. Already the program is remarkably successful, considering its "volunteer roots."

Burial Protection and Repatriation Legislation

Our legislative agenda over the past year focused on two long-term preservation issues that are common nationwide: the repatriation of remains to Indian tribes and the protection of significant cultural resources on private lands. Both bills were the result of partnerships between special interest groups. The repatriation bill was sponsored by the Gila River Indian Community and its success was due, in large part to a willingness to compromise on the part of both tribes and archeologists. Rather than create a divisive atmosphere as often marks discussion of this issue, both groups kept open minds and a desire to form a true partnership and achieve a resolution satisfactory to all. The bill prescribes notification procedures upon the discovery of archeological, paleontological and historical sites on state lands, or by any state agency, county, or municipal corporation. It also includes a process whereby the director of the State Museum notifies and consults with all interested parties on the disposition of human remains and funerary objects. Issues of reburial, curation and scientific analysis are included in the legislation. The private property bill was co-sponsored by the Hopi Tribe and State Historic Preservation Office. When the bill was first introduced it encountered many objections from private property owners, antiquities dealers, and special interest groups. As a result of these objections, it experienced many transformations and its passage was considered an impossible task on many occasions. The bill was given a boost when citizens from the small town of Cornville, AZ joined with several Native American tribes to halt the destruction of Sugarloaf Ruin, a significant archeological site located within the community. Largely due to their actions and the compromise reached among archeologists, tribes, and special interest groups such as the Cattlemen's Association, Farm Bureau, realtors, cotton-growers, developers, contractors and utility companies, the bill passed with a two-thirds majority in both houses of the legislature, thus enacting an emergency clause that allowed it to take effect immediately. The bill requires that landowners, lessees or their agents inform the director of the State Museum of the discovery of human remains and funerary objects. It provides for consultation with Native Americans, sets a time limit on the process, establishes a fund to pay for costs of removal of remains and sets criminal penalties for unauthorized disturbance or removal of said remains.

Saving the Historic Property Tax Reduction

A third legislative victory did not result in the passage of new legislation, but rather saved existing legislation that was threatened due to the state's fiscal crisis. Arizona offers historic property homeowners whose properties are listed on the National Register of Historic Places a tax reduction for maintaining their home. The program is very simple to administer and is the only financial incentive offered to owners of private, non-income producing property. At one point during the legislative session, the legislature considered removing all property tax incentive programs. Such action would have dismantled the State Property Tax Reduction program. As a result of the actions of the statewide preservation organization and private property owners, the legislature was persuaded to continue the historic property tax reduction program.

Arizona Heritage Fund

Another initiative that will bring a windfall to historic preservation in Arizona was the passage of the Arizona Heritage Fund by 62% of the voters of the state. The initiative calls for 20 million dollars annually to be diverted from state lottery receipts to Arizona State Parks and the Arizona Game and Fish Department. Of this total amount, \$1.7 million will be spent on local, regional and state historic preservation projects that require funding for stabilization, easements, rehabilitation, education and preservation program development, reconstruction, restoration, interpretive development, acquisition and maintenance. Administered by the SHPO, we anticipate that the majority of these monies will be used as pass-through grants. The proposition language was developed by the Nature Conservancy and ultimately was endorsed by more than 100 conservation groups, including those with interests in natural areas, parks and recreation, off highway vehicle associations, hunters, trails groups, historic preservation and archeological societies, and myriad others. The fund represents great potential for the future of historic preservation in Arizona.

We have had a successful year in enhancing the protection of archeological sites, preserving our historic heritage and developing cooperative relationships among tribes, preservationists and special interest groups in Arizona. Our success in the legislative arena can be attributed to good communication and a willingness to work together toward the common goal of preservation of our heritage. Many of these successes can be seen as a result of our reaching people, educating them about preservation and the past, and trying to foster a preservation ethic in the citizens of the state. Without the public education and involvement aspects of our program, we would not be where we are today.

Dr. Shereen Lerner is the Arizona State Historic Preservation Officer.

Documenting the Urbanization of Texas

W. Dwayne Jones

The popular image of Texas remains one of wide open spaces, a frontier inhabited only by lonesome cowboys, herds of cattle, and oil rigs. In fact, Texas is largely an urban state with 79% of all Texans residing in towns and cities over 2,500 and 80% concentrated in Metropolitan Statistical Areas (MSAs) (1980). Urbanization, however, was slow. It was only after World War II that the population of urban areas in Texas began to match that of other parts of the country. Why then did the Texas SHPO devote attention to urbanization, and develop as its first statewide historic context "Community and Regional Development in Texas, 1690-1945"?

In order to answer this question, we must consider the urbanization of Texas in developmental stages up to World War II. These stages fall into three categories:

Pedestrian City, 184~1880. Small communities generally with populations of less than 10,000, most less than 2,000, are dependent on primitive transportation systems and residents are spatially organized with inner-city rich and peripheral poor. The economies are typically regional trade entrepôts or agricultural handling centers.

Suburbanization, 188~1920. Communities are transformed by the arrival of rail systems and interurban lines which shift the inner-city wealthy to new developments on the edge of town. Commercial and industrial activities expand and the urbanized area spatially increases. The economies are typically agricultural service centers and limited processing.

Truck and Automobile Era, 1920-1940 (1970). The truck allows industries to move away from rail and water connections to cheaper and larger parcels of land. The automobile allows wealthier residents to move away from the downtown and older neighborhoods. These shifts lead to a decentralized city and erosion of the urban fabric, social institutions and creates inequalities of race, wealth, and status. The economies are typically still agricultural service and processing centers with some industry, particularly extractive industry.

Each stage is similar to ones in other areas of the Nation, but the Texas stages resulted in fewer large urban concentrations for several reasons. First, because of the abundance of land and unique geographic characteristics, settlements and agricultural pursuits were viable in many places. Second, the wide distribution of resources, namely oil and gas reserves and the increased presence of railroads, encouraged occupation of almost all areas of the state. Third, the heavy emphasis on agriculture dispersed the population across the state into mostly small farms and placed a priority on agricultural technology and techniques rather than industrialization. For these reasons, during the Suburbanization, 1880-1920 stage, Texas experienced its most dramatic growth of small towns particularly in east, southeast, and central Texas. Hence, by developing a historic context for "Community and Regional Development," we are recognizing the broadest historic period of urbanization and the largest number of historic resources.

SHPO Approach to Identification and Registration

In the early 1970s the SHPO concentrated on nominating to the National Register of Historic Places major historic buildings and districts around the state. By the late 1970s, however, the attention shifted to recognizing the lesser-known cities and towns, especially those under 50,000 in population. The approach of the SHPO at that time was to use staff in surveying and preparing nominations. The first complete community-wide effort focused on Bastrop, a small central Texas town outside Austin. Staff conducted extensive field work and then wrote the first multiple resource nomination in the state. While the

rudimentary nomination mostly covered individual sites and provided only a loose overview of the community's history, it served as a point of departure for documenting and registering historic resources in other small towns.

By the early 1980s, the SHPO had gained more experience in this process and in conjunction with the emerging Texas Main Street Project began to target small towns under 50,000. By combining efforts with the Main Street Project, the SHPO could provide stronger support to the community and help establish solid community preservation programs. Through the use of survey and planning grants (Historic Preservation Fund grants), a number of small towns were surveyed and multiple resource nominations prepared. Hillsboro (1984)*, Georgetown (1985), Stamford (1986), Waxahachie (1986), and Ennis (1986) are some of the earliest communities covered in this approach. Six other communities have followed since 1986. The cumulative result by the late 1980s was that more small cities offered multiple property listings than did medium and large cities in the state.

In 1987, when reorganizing our comprehensive preservation planning, a concerted effort was made to make what was already occurring, and was indeed worthwhile and practical, a natural part of the planning effort. It followed that our context-based planning should use the ongoing community-by-community approach developed in the 1980s. Thus, the "Community and Regional Development" context became one of the most practical statewide contexts.

How to Use the Statewide Context

The approach to studying a community is first to develop a historic context overview or framework for surveying and nominating a city or town. If the researcher reads the overview, he or she would be able to place the project community in perspective of the overall state and then follow a general outline for documenting its community development. For example, if a community in southeast Texas was the subject, then a researcher might discern from the statewide context its approximate date of development and significance *visa-vis* the state's urbanization. Then, a more thorough study of the community follows, and the SHPO is able to add another piece to the overall puzzle of urbanization. At the same time the statewide context and its property types are revised and/or confirmed.

Outline for Documenting Community Development

The outline for documenting a community was developed by the SHPO staff when preparing the multiple property nomination for the City of Brenham (1990). The Brenham nomination is now the model context that serves as an example for new community studies. In general, these studies begin with some background reading on the community's history. From that and a brief windshield survey, the researcher identifies approximate dates of construction for the majority of the buildings and structures. Then, a set of physical factors are explored as they relate to the community. Some of these factors include:

Town Form. Beginning with the commercial core of the community the researcher identifies the urban morphology: is this a courthouse square, grid pattern, some combination?

Transportation Routes. The researcher identifies major transportation routes and historic routes in order to locate strips of development.

Natural Features. The researcher identifies natural features (e.g. river, mountains, hills, soils, etc.) and how the natural features shaped the physical form of the community. This information also may provide an insight into building materials, e.g. a large clay deposit may have helped establish a brick manufacturing business that resulted in many brick structures.

Periods of Economic Growth. Through the examination of historical records, the researcher should be able to document periods of growth with special attention given to

the periods resulting in building booms. This information may provide insight into concentrations of housing built within a few years, i.e. neighborhoods, and provide specific dates for a period of significance.

Economic Sectors. The researcher also should note the major economic sectors for the community (e.g., agriculture, mining) and its subsectors (e.g., cotton processing, mining supplies). These often will result in the identification of additional resources such as cotton gins, mill housing, and properties related to significant individuals in the industry.

Demographic Data. The researcher should also review census data to get population characteristics such as increases and decreases, socio-economic profiles, and ethnic concentrations.

After identifying the physical factors, it is possible to construct a description of the community. These ideally focus on the north-south, east-west directional development, describe the landscape characteristics, and give an overall "bird's eye view" of the community. All of this information is ultimately consolidated into a multiple property nomination to the National Register of Historic Places. Finally, the data and descriptions developed are coordinated with ongoing planning projects in the community. We encourage the use of base maps showing historic properties to be the same used in other planning efforts. These procedures help incorporate historic preservation concerns with the overall community plan.

The comprehensive preservation planning approach described above is leading the agency in the direction of communicating in a language and format that land use decision makers, principally local government planners, understand. At the same time, we feel that we are capitalizing on the most significant period of urbanization and locating and registering the majority of eligible properties in each community. The agency is also gathering valuable information that provides pieces to the overall picture of urbanization in Texas. Piece by piece we are developing what might be called a "John Reps" description of urban settlement. If we are able to continue in this direction, the SHPO will someday have recorded and preserved one level of the invaluable link in the Federal-state-local partnership.

W. Dwayne Jones is preservation planner for the Texas Historical Commission.

The author gratefully acknowledges the work of Christopher Davies of the University of Texas Department of Geography for parts of the background work for the statewide historic context.

*Denotes year listed in the National Register.

Understanding Historic Landscapes: The Rhode Island Survey

Lucinda A. Brockway

From Burrillville to Little Compton, Rhode Island's political, social, and economic history has produced a broad range of cultural and designed landscapes forming layers of manmade landscape history over the state's richly diverse topography. The recognition that both designed and vernacular spaces reveal the design ideals of an era, ethnic group or individual led the Rhode Island Historical Preservation Commission to develop a thematic survey which identified its designed landscape resources. The survey forms the basis for a comprehensive thematic National Register nomination. An additional survey of Rhode Island's vernacular agricultural landscapes will be conducted later this year. The two surveys will be combined into a scheduled publication on the history of land use and landscape design in Rhode Island. In addition, the surveys will act as a preliminary preservation strategy document which recognizes the importance, and the fragility, of these landscape resources.

Fortunately, Rhode Island is one of two states in the Union with a landscape architect sitting as an elected member of the state legislature. With his support, the Rhode Island Legislature appropriated \$5,000.00 for the Rhode Island Historical Preservation Commission to fund an archival search of designed landscapes in Rhode Island. Past Designs was hired as an outside contractor to undertake this survey. The hope was that once this survey identified how many designed landscapes were in the state, then more money could be obtained to fund further study.

The archival survey, undertaken in 1988, researched traditional and non-traditional archives. Primary and secondary resources were consulted at town, regional, and private libraries, the Library of Congress, state and local historical society collections, university archives, and private collections. Known repositories for landscape architects' papers and records were contacted for information on file which might relate to work done in Rhode Island. These repositories included Wave Hill's Catalogue of Landscape Records in the United States and the Garden Club of America's nationwide inventory of gardens. Period garden photographer's collections, HABS/HAER records, period magazine articles, cartographer's archives, and post card collections were invaluable archival resources.

Information from each of these sources was recorded on note cards and eventually put onto a computer word-processing system and database program. Materials were not researched in depth; instead the source materials and their location were noted along with catalog numbers, phone numbers and other information necessary to return to the materials at a later date. Eight months later a preliminary report was produced which identified over 400 designed landscapes in Rhode Island. Each property listing included its design date, designer, property name, historic owner name(s), location (if known) and a brief description of the resource. All source information was included with each listing.

With this report as evidence of the vast number of landscape resources which needed further research, the Rhode Island Legislature appropriated an additional \$40,000 for the Rhode Island Historical Preservation Commission to conduct more in-depth research, and an on-site survey of each property. The result of the second contract would produce a National Register multiple resource nomination for those properties which qualified.

The standard property survey form which the Preservation Commission had been using for survey work included very little landscape information. Several survey forms used in other landscape resource surveys were reviewed. Most of these were developed to assess one landscape type (i.e. parks, gardens, open spaces). The best of these forms were incorporated into a new state form. The form was tested and revised throughout the early phases of the survey process. The continual interplay of designed landscapes overlaid on a

cultural landscape base required that the final survey form include space for the description of both landscape types. We were interested in developing a form which could be computerized and used by individuals of varied backgrounds, with lists of items which could be checked off in the field. Categories included architectural features, water features, plant materials, construction materials, landscape and garden types, garden furnishings, etc. However, when preparing the site descriptions for the report back in the office, the most useful section of the survey form was the space for a one-paragraph written description of the site.

The largest collections of research materials were analyzed before beginning the survey process. However, the contract starting date was April 1, requiring that the in-field work be conducted prior to all of the research being completed. It would have been more beneficial to begin the contract in the late fall and spend the winter months conducting the research. Then, on-site surveys could be conducted in better weather with a full file of research materials in hand.

One person did all of the archival research and the on-site surveys. In this way, in-field connections could be made between sites, and town-based library research could be conducted in bad weather or at times of the day when outside work was not possible. In many cases a site had been identified in the archival research through its historic owner's name. Many properties did not have street numbers, and their locations had to be traced through town deeds, assessor's maps, period insurance maps, or by interviewing the older town residents. Though it was not beneficial to be doing the research contiguously with the in-field work, it was beneficial to have one person identified with the survey to work with the town resources and residents. This was especially beneficial when scheduling time with local residents for touring the town by car to pinpoint the exact location of a site, especially those which had been subdivided or significantly altered.

Volunteers were used for one day of the survey process as a workshop for members of the Rhode Island Association of Olmsted Parks. Having knowledgeable surveyors go to the field with a good history of the site, a standardized photograph policy, and an appointment to gain access is perhaps the best method of using volunteers for the survey process. Those properties which had a complete file history, exact street address and an owner willing to allow property access and be interviewed by the volunteers were the sites most successfully surveyed during this workshop. The volunteers could develop a good survey and evaluation of each individual site given the proper background information. The level of interest and professional background of the volunteers proved invaluable in determining the success of the workshop.

The final survey included 473 property listings, including 72 (15%) designs which were not executed. Of those which were executed, 190 (40%) are extant, and 102 (22%) are partially extant. Private residential sites made up 59% of the properties while 24% were public parks. The remainder consisted of designed plats, cemeteries, schools, institutional grounds, country and private clubs, civic/town improvements, parkways, commercial sites and forts. There were 49% designed between 1875 and 1925.

The property listings are organized by town so as to easily dovetail with the existing filing system at the Rhode Island Historical Preservation Commission. Each property is listed by date of initial construction or earliest documentation with succeeding alterations/additions noted. Other items include notes as to designer, address, property name, current owner (when known), existing condition (on date of survey), history, comments, and sources.

The 780-page final survey report includes a context statement, inventory statistics, process description, list of those resource types which were included in the survey, list of landscape types requiring further study, property listings, and bibliography. A multiple resource nomination to the National Register is now in progress. Approximately half of those landscapes which qualify for the register are already listed for other categories of significance; these registered properties will be amended to include landscape architecture

as a category of significance. The remaining properties which have not been registered will be nominated so that they may be recognized as important historical resources.

By necessity, the development of a statewide survey is more superficial than a complete research document on one garden. Plans and other historic materials were reviewed to determine the installed landscape plan and later additions or changes. Each design alternative, every subtle idea, criticism, or plant discussed by the client and the designer was not detailed in this type of inventory. Instead, the concern was to document the installed plan and its change over time, then evaluate its current appearance based on that information. Individuals interested in preserving or researching one designer, one property, or one landscape type can go into further detail on each of the listings. Individuals seeking information about the survey and its process or conclusions can contact the Rhode Island Historical Preservation Commission, 150 Benefit Street, Providence, RI 02903.

Lucinda Brockway is a landscape preservationist and consultant to the Rhode Island Historical Preservation Commission.

Certified Local Governments: Status Report

Stephen A. Morris

In *The American Mosaic*, J. Myrick Howard claims that "historic buildings are saved locally." While this may be an overstatement, certainly local governments are an essential player in the Federal-state-local preservation partnership. Local governments formally join the partnership through the Certified Local Government program (CLG). (Also see *CRM Bulletin*, Vol. 11, No. 4.)

Every state in the Nation has at least one CLG and several have as many as 50 or 60. Nationwide, the total number of CLGs has pushed beyond 600 and continues to grow. While still minimal in comparison with the many thousands of local jurisdictions that exist in this country, the number of CLGs is, nonetheless, impressive given the short time the CLG program has been in operation.

It was the 1980 amendments to the National Historic Preservation Act that called for State Historic Preservation Offices (SHPOs) to "certify" local governments to participate in and, thereby, expand the partnership between states and the Federal Government to identify, register, protect, and treat historic properties. The specific role to be played by local governments, their relationship to the other partners (the SHPOs and the National Park Service), and the minimum Federal requirements for certification were codified in Federal regulations in 1984. The CLG program became fully operational the following year with NPS approval of state certification procedures and the certification of the first local communities.

Created partially in response to the demands of local government leaders that they should have a say in the National Register listing of properties in their community, as well as in recognition of the importance of local efforts in preservation, the CLG program has been many things to many people. The SHPOs have been given a relatively free hand in shaping the program to the needs of their own state. Consequently, in some states, CLGs have been conceived as mini-SHPOs—performing on the local level the same sorts of functions that the SHPO carries out on a statewide basis. In other states, the CLG program is seen more as a mechanism to support (through funding and technical assistance) locally-generated preservation projects that may or may not relate directly to what the SHPO is doing.

Given the growth of the program as well as its diversity from state to state, the Interagency Resources Division of the National Park Service, Washington Office, initiated an assessment of the CLG program last year. The purpose of the assessment was to gain a better understanding of the CLG program from a national perspective and to gather information on policy issues affecting the program. An additional goal was to compile basic information about CLGs in order to be able to answer questions such as: why do local governments participate in the CLG program?; what types of preservation projects are most frequently funded by CLG subgrants?; and how do SHPOs allocate funds to their CLGs?

The core of the assessment was a survey developed by NPS, in cooperation with the National Conference of State Historic Preservation Officers (NCSHPO) and the National Alliance of Preservation Commissions (NAPC). In February of 1990, separate questionnaires were sent to CLG coordinators in 50 State Historic Preservation Offices and directly to Certified Local Governments across the country. Responses came from 236 CLGs or 51% of those receiving the questionnaire and 40 of the 50 SHPOs. Although they constitute a snapshot in time, the responses provide for the first time a nationwide overview of the CLG program. This overview helps to fill in what was previously a sketchy picture of the program. "Certified Local Governments 1990: A Status Report," a partial summary

and analysis of the responses has recently been distributed to SHPOs and CLGs. This report deals only with the basic characteristics of CLGs, leaving a summary of the policy issues raised by respondents for a subsequent report to be released as a discussion paper.

Based on the responses to the questionnaire a typical CLG is a small town or city (less than 10,000 population or between 10,000 and 25,000) that established an official governmental role in local preservation at least four years before becoming certified. It has a historic preservation commission composed of six members representing neighborhood residents, the local business community, and a wide variety of professions other than the preservation professions defined in Federal regulations (archeology, architecture, history). If there is a preservation professional on the commission it is most likely to be a historian or an architect. Typically, the commission has a part-time staff member from the planning or community development department. The typical CLG has enacted a preservation ordinance or regulation allowing design review in historic districts and permitting the delay (though not the prohibition) of demolitions of historic properties. The typical CLG participates in the CLG program primarily in order to qualify for CLG subgrant funds from the SHPO and applies for this funding every year. It has received three CLG subgrants since becoming certified and these have been used to fund survey and inventory, public education, and National Register nominations.

The basic information gathered through the survey has provided NPS with baseline data on what CLGs look like and what they are actually doing. It has also provided key information on how SHPOs run their own CLG programs. While far from comprehensive, this data has permitted a much better characterization of the CLG program from a national perspective than was possible before. The information has also been helpful to SHPOs as a basis for comparison for their own CLG programs.

The survey information also raises certain policy issues in addition to those raised directly by the respondents. These issues will be summarized in a discussion document which will be distributed to SHPOs, the NCSHPO, and the NAPC and will be the framework for future discussions on policy issues. For example, the relative absence of preservation professionals (as defined in Federal regulations) on CLG preservation commissions highlights the need to reevaluate those policies (both state and Federal) that envision the commissions as scholarly bodies composed of experts in traditional preservation disciplines. Additional policy issues raised directly by the respondents include the following: the role of CLGs in commenting on National Register nominations and of the SHPO in verifying that commissions had the appropriate expertise in making their recommendations; the relatively small amount of money garnered by CLGs through the program; the perceived heavy administrative burden of the program; and, the need for additional staff both at the local and state levels to administer the program.

As the number of CLGs continues to increase and CLGs become more active partners in the national historic preservation program, it will be increasingly necessary for all those involved in the CLG program to monitor its evolution and make efforts to continue to improve the program. The information generated as a result of the NPS assessment provides a foundation upon which those efforts can be built.

Copies of "Certified Local Governments 1990: A Status Report" can be obtained by contacting Stephen A. Morris, Certified Local Government Coordinator, National Park Service, Interagency Resources Division, at 202 (FTS) 343-9516.

Stephen A. Morris is a preservation planner in the Interagency Resources Division, National Park Service.

NPS Libraries: A Survey

Betsy Chittenden

Any discussion of high tech solutions to real world information management problems almost invariably comes up with the need for developing sparkling new, computerized "information management clearinghouses." But information management clearinghouses have been around for centuries. They have been known as "libraries." As storehouses and distribution points for information, libraries play an unheralded but important role in information management in the NPS, a role in which they could be far more effective with the judicious application of computer and telecommunication technologies. As a starting point for fulfilling its responsibility for ensuring that "libraries and other information resources are coordinated and integrated so as to effectively satisfy Servicewide needs and priorities," the NPS Information and Data Systems Division (IDSD) last year carried out a major survey of libraries in the National Park Service. The survey described more than 300 separate libraries and archives in the NPS, ranging from small collections of a few hundred volumes to extensive enterprises with tens of thousands of volumes, rare books, microfiche, photographs, original documents, manuscripts, oral history tapes, drawings, and videotapes. The results of the survey show the problems that the NPS faces in information management, but also a wide range of fascinating and unique collections, including specialized and high quality collections on cultural resources topics that are information resources for a wider public. A copy of the library survey, including short descriptions of all 300 NPS libraries, has been mailed to all NPS organizations as part of the Long Term IRM Plan (see our Information Management department in this issue).

The State of NPS Libraries

By and large, the typical library in a park is a modest collection that serves as a reference library for the park staff. A typical collection would number between 500 and 2,000 volumes, and include works on persons or events associated with the park, park and local area history, and local natural history. While cultural parks tend to have a greater emphasis on historical topics, and natural parks on natural topics, most park reference libraries keep some works of both types.

Park libraries tend to be small operations, with little or no budget or depending on small donations from cooperating associations to add to their collections. Very few have full or part-time librarians on staff, and many rely on volunteers and collateral work by other staff to maintain the library. Most are open to the public by arrangement only.

In its analysis of the NPS library system as an information management tool, the survey summary concludes that it suffers from a lack of almost everything needed to maintain these crucial information centers. The summary reports that "NPS libraries suffer from funding shortages, staffing shortages, the absence of comprehensive training, and a lack of resource sharing with other park library sites." There are no standardized management tools in use for indexing or accessing library collections. The libraries are split almost evenly between those using the Library of Congress classification system, the Dewey decimal system, and those with other or no classification schemes. Very few have computerized cataloging or searching aids, or participate in inter-library loan systems or networks.

Yet the report is optimistic about what can be done to strengthen NPS libraries as important information management tools in supporting the mission of the Service. The concept presented is of a full-time NPS library function with the resources to create a National Park Service Library Network (BIBNET). This Network would be based on NPS

regional libraries that would lead library services in their respective regions. An excellent system like this is already in place in the Pacific Northwest Region, where a central regional library provides cataloging and reference services for its parks. A network of regional libraries would work to centralize certain library operating functions, such as reference, cataloging, acquisition, interlibrary loans, and training at the regional levels. Future IDSD budget initiatives will request resources to work with regional ~ staff to develop local and wide-area computer networks to link park and regional libraries, and to link regional libraries with each other. There should also be a coordinated management structure for library services, working on job descriptions and career paths, library service standards, and operating procedures.

Using NPS Libraries

Many NPS libraries are important information resources for NPS staff and others as well. For those doing research on the history of a park or a locality near or including the park, most park libraries have material on their own history and generally on local history as well. Many have rare books or other hard-to-find materials. Many of the historical parks and monuments that are centered around a famous person have collections related to that person's life and times. Several have the historical libraries owned by that person, and/or have archival document collections. Several contain the results of major oral history projects, such as the Fort Barrancas oral history project at the Gulf Islands National Seashore library, or the 170 tapes of the farm life of Dwight Eisenhower in the library at Gettysburg National Military Park. A few historical parks have extensive collections in a particular subject area, such as the collection on prisoners of war (from all wars) at Andersonville NHS, reputedly the largest collection on this subject in the United States. A number of parks have extensive collections of other media, such as photographs or oral histories.

Some of the larger and more interesting historic and cultural collections are described below. A number of other smaller collections not listed here contain rare books, photographs, and other interesting and rare material. Since almost without exception park libraries are under-staffed, or have no staff at all it is always a good idea to call the park in advance to use the library. Most, but not all, park libraries are open to the public by appointment. Some material, such as rare books, photos, or documents, and a few entire collections are treated as part of the park's museum collection and curated as such; generally special permission is needed to examine this material. Policies and procedures for using the collections vary from park to park; often material can only be checked out by NPS staff.

Some Noteworthy Collections for Cultural Resources

Historic Libraries and Archives

Adams National Historic Site, Stone Library Adams NHS, Quincy, MA

This library is the collection of four generations of the Adams family. More than half of the 14,000 volumes belonged to the sixth president, John Quincy Adams. The collection is treated as part of the historic site, but may be used by researchers with the permission of the superintendent. Contact Judith M. Curtis, curator, at 617-773-1177.

Edison's Historic Library and Archives Edison NHS, West Orange, NJ

Edison NHS has the 10,000 volumes in Thomas A. Edison's personal library (cataloged by Edison using his own personal system!), as well as 4.5 million pages of Edison's papers, such as business documents and patents. Both are part of the park's museum collection and require special permission to be used. The archives also contains about 60,000 still photos related to Edison which are well indexed and some 30,000

phonograph records (both disc and cylinder), mostly uncataloged, as well as archival motion picture footage (newsreel and company film). A "Guide to the Archives" is available. Contact Nancy Waters (library) or George Tselos (archives) at 201-736-0550 or FTS 341-6222.

Olmsted Archives and Library Frederick Law Olmsted NHS, Brookline, MA

This collection contains the bulk of the work of the famous landscape architecture firm founded by Frederick Law Olmsted: some 120 years worth of business documents including correspondence, project drawings, photographs, and models. Part of the park's museum collection, the archives and an accompanying reference library on landscape architecture may be used by appointment. Researchers should be aware that this vast collection is as yet only partially cataloged. Contact Liz Banks, curator, at 617-566-1689 or FTS 223-2100.

Longfellow's Historic Library

Longfellow NHS, Brookline, MA

This library which is part of the park's museum collection contains 10,000 rare books and 175 linear feet of archive and manuscript materials that belonged to Henry Wadsworth Longfellow and his family. The fact that the books are part of the furnishings of Longfellow's home, on the shelves where he placed them, adds another historic dimension. By appointment only. Contact Liz Banks, curator, at 617-566-1689 or FTS 223-2100.

Special Collections on Cultural Resources Topics

Andersonville National Historic Site Library Andersonville, GA

Site of the notorious Civil War prison, the Andersonville library has a total 3,900 volumes including what is believed to be the largest collection in the United States of materials on prisoners of war from all wars. Public use on a case-by-case basis; new procedures will be implemented after a planned move to a new visitor center. Contact Carlene Petty at 912-924-0343.

Morristown National Historical Park Library Morristown, NJ

This library was formally authorized and established in the park's 1933 enabling legislation. The subject emphasis is the Revolutionary War, George Washington, 18th century military history and material culture. The largest of the park libraries, it contains approximately 60,000 volumes, about one third of which are rare books. The library also houses a number of important manuscript collections, containing more than 300,000 pieces, in addition to 800 reels of microfilm, 20,000 historic photographs, 500 maps and plans, and an extensive serials collection. By appointment only. The library also has inter-library loan services through the New Jersey Regional Library Network. Contact James L. Kochan, curator, at 201-539-2016 or FTS 341-4531.

San Francisco Maritime National Historical Park, 1- Porter Shaw Library San Francisco, CA

An extensive library on maritime history, particularly of the Pacific. Along with 15,000 books and 3,000 periodicals, this library contains 200,000 vessel plans, 250,000 photographs, 2,000 ship's logbooks, 650 nautical charts, archival material, oral histories, pamphlets, and microform. The library has set hours of operation Tuesday through Saturday. Contact Dave Hull, principal librarian at 415/FTS-556-9870.

San Juan National Historic Site, Military Architecture Archives

Old San Juan, Puerto Rico

This library specializes in military architecture in the Caribbean and at Spanish sites in America, and Puerto Rican military history. It contains approximately 20,000 reproductions of primary documentation, including 5,000 maps and plans, approximately 2,000 photographs, and 300 publications; by appointment only. Contact Milagros Flores, historian, at 809-729-6960, 729-6777 or FTS 498-6777.

Betsy Chittenden is the Information Management Coordinator for Cultural Resources, National Park Service. John Peterson, deputy chief, Information and Data Systems Division, contributed to this article.

' Some libraries and some portions of library collections, generally rare books and manuscripts, are curated as museum objects. Many parks use archival collections as libraries and described them in response to the survey.

An Experiment in Archeological Site Stabilization

Cumberland Island National Seashore

John E. Ehrenhard

Robert M. Thorne

Changes in the natural and cultural environment on and around Cumberland Island National Seashore are accelerating shoreline erosion; the rate of loss of unprotected cultural deposits has increased accordingly. Surprisingly, along the northwest shore between Terrapin Point and Cumberland Wharf, the tidal marsh zones are stabilizing thanks to an increase of naturally deposited oyster shell rakes (dikes). Construction of an experimental, artificial rake emulating this natural phenomenon was undertaken to expedite the revegetation of a static marsh zone, and thus help stabilize the bankline and its cultural deposits.

Numerous significant archeological sites and cultural resources are being severely degraded through cutbank shoreline erosion on the western side of Cumberland Island National Seashore, Georgia (see map). Wind- and boat-generated waves, daily tidal fluctuations, and the deepening of the inland waterway are taking their toll.

Concern over accelerating shoreline loss led to a program in 1987 to determine the rate of bank-loss at two sites, Brickhill Bluff (CUIS-24) and Dungeness Wharf (CUIS-6). During the first year of the monitoring program, average losses of six inches at Dungeness and four feet at Brickhill Bluff were recorded; it was imperative that some stabilization measure be implemented.

An October 1988 inspection of the western shore however, indicated that while some portions of the shoreline were eroding, others were rebuilding and stabilizing. Several areas near the northwest end of the island between Terrapin Point and Cumberland Wharf were developing stable tidal marsh zones. This evolution was attributed to the formation of naturally deposited oyster shell rakes.

The rakes, rising to a uniform height of about two feet, varied in basal width according to the wave force factors that caused the shell deposition. This tightly compacted shell is resistant to low tide wave action and further stabilized by submersion during high tide. Rather than forming parallel to the island's shoreline, the orientation of the natural shell deposition runs parallel to the dominant wave alignment.

Contiguous rake formation occurs in such a manner that enclosures develop along the low tide line. These miniature stilling ponds act as settling basins for silts and sands carried by the Cumberland River (Photo 1).

Tidal incursion fills the ponds, allowing sediment to accumulate as the tide goes out. The tightly compacted shell (Photo 2) provides an erosion resistant armor on the active wave side while allowing water trapped behind the rakes to filter through. Once sufficient silt is deposited in these small basins, colonies of grasses begin to develop. Notable among these are three salt and submersion tolerant species: *Spartina alterniflora*, *Spartina patens*, and *Distichlis spicata*. As the grass colonies expand, additional silts are trapped reducing the force of incoming waves.

The buffering action of a well-established, submerged plant colony at the lower marsh levels allows the subsequent evolution of herbaceous species, such as *Juncus roemarinus* and *Salicornia virginica*, at slightly higher elevations. These species provide high marsh soil protection as a result of the damping action of the leaves and the binding action of the root system. Above this band of marsh grasses and in areas less frequently inundated by high tides, woody species, such as the prolific false-willow (Photo 3) and high-tide bush, serve to hold the base of the cutbank in place.

Imitation of this marsh development and land building process, with its natural healing mechanism, was determined the best plan to follow for protecting the shoreline.

The Experiment

The Brickhill Bluff site (CUIS-24) along the Brickhill River was the chosen location for the experiment. This site represents prehistoric and historic Indian occupations, and is the probable setting of the 16th-century Spanish Mission known as San Pedro y San Pablo de Puturiba. It has also been recommended for nomination to the National Register of Historic Places.

At CUIS-24, the river measures about 0.3 miles wide and provides a relatively long (1.5 mile wave fetch) course for northwesterly winds resulting in shoreline exposure of approximately 2,000 linear feet of midden materials. These cultural deposits vary in thickness and range in depth from 6 to 24" in an almost vertical bankline that reaches a maximum height of 4' (Photo 4).

The soil of the 50' wide "beach zone" between the bankline and the river consists of a very sandy loam. This sandy deposit lies on a tightly compacted Pleistocene salt marsh deposit that is marl-like in composition. Prone to the effects of storm driven tides and the higher tidal levels associated with the lunar cycle, the soil has eroded to the Pleistocene deposit. Vegetation is virtually absent unless a sand/soil covering is present to support root growth. Where the marl is covered, several species of grass have re-established. In the past 15 months, approximately one-third of the "beach zone" has begun a natural revegetation.

The specific area selected for the stabilization experiment was a section eroded down to the Pleistocene marsh surface and covered with only a thin sand deposit. The terrain was essentially barren of invading marsh grasses (Photo 5). Tidal transport of sand was no longer effective.

Once the location and alignment of the artificial rake was determined and its length approximated, the collection of dead oyster shell began. * Numerous natural rakes are located along Cumberland Sound and on the Cumberland River; one location on each waterway served as the primary sources of shell acquisition. At low tide, the rakes were some six feet above the water line, exposing a slope of Pleistocene marsh deposit and making it impossible to fill the bags and load them for transport to the site by boat. At high tide, the base of the rakes on Cumberland Sound was covered with about two feet of water, leaving the shell more easily accessible. A similar situation existed at the Cumberland River rake. Shell had to be loaded on the boat and transported during periods of high tide.

It was concluded that a shell rake could not be imitated by simply piling shell on the beach; tidal activity would quickly spread the shell into a thin sheet. The solution was to fill burlap bags with the shells. The bags are strong, porous enough to permit the passage of both water and silt, and they are biodegradable.

Shell was shoveled into the bags; when about three-fourths full, the bags were closed with twisted wires. The estimated weight of each bag was forty pounds; when laid flat, each sack spanned about 30". Two hundred eighty bags were filled from the two locations and transported to the area to be tested. The bags were laid out in a semicircle in two parallel adjacent courses with a third course resting on top. The rake thus measured about 2.5' high, 4' wide, and covered a semicircular distance of about 178'. The bankline

protected by this arc spans a distance of 155'. It took about three days to fill, transport, stock pile the bags at the site, and lay them in place (Photos 6 and 7).

Once the bags were situated, only one high tide was observed before the team's departure from the Island. At the lowest point, tidal water flowed over the bags and into the artificial stilling basin. Inside the enclosure, silt particles could be seen settling out of the water. Marine life, particularly blue crabs, quickly found the nicks and crevices between the bags. As the tide receded, crabs moved back and forth across the tops of the bags, inspecting and apparently preferring their new environment.

The original intent was to transplant marsh grass in the area enclosed by the artificial rake. The rate of natural revegetation adjacent to the experiment suggested that it might be best to let nature take its own course. Furthermore, an appropriate growth medium (sand and silt) to support the revegetation had yet to form. If the projected accumulation of fill material occurs as predicted and vegetation does not result, a transplanting effort will then be undertaken.

Final Protection Step and Monitoring

Cumberland Island has a sizable population of wild pigs and horses that forage and graze along newly established marsh grass communities. To protect the rake and revegetation experiment from predation, strips of GEOWEB were installed on paths leading down to the rake. This material opens into squares and acts similar to a cattle guard; neither pigs nor horses will cross it.

The rake will be inspected on a regular basis to insure that mechanical failure does not occur. Stakes rising three feet above the original ground surface inside the enclosure will be used to chronicle the rate of sand/silt accumulation and the hoped for natural invasion of marsh vegetation.

For additional information, contact John Ehrenhard at the National Park Service Southeast Regional Office, 75 Spring Street, SW, Atlanta, GA 30303. Future articles about this project will report on results and costs associated with this experiment.

John Ehrenhard is chief, Interagency Archeological Services Division, Southeast Regional Office, National Park Service.

Dr. Robert Thorne is Director of the National Clearinghouse for Archeological Sites Stabilization and Director for the Center of Archeological Research. He is also professor of anthropology at the University of Mississippi.

NPS has a cooperative agreement with the University of Mississippi to be involved with site stabilization in the U.S.

*Regulatory responsibility for the Intercoastal Waterway that lies to the west of the Island, and for the tidal marshes that are a part of the National Seashore is vested in the Corps of Engineers and Georgia's Department of Natural Resources. It was necessary to obtain permit authority from the Corps to initiate the project. Permission from the state was required to recover a sufficient quantity of dead oyster shell from storm deposited rakes to complete the actual installation of the imitation rake.

Further scheduling problems arose when Hurricane Hugo struck the Carolina coast. While Cumberland Island was not directly affected, destruction in other National Park Service facilities drew manpower and equipment away from the stabilization project. Fieldwork was finally completed between June 7 and June 10, 1990.

Preserving Historic Scientific and Technological Facilities

In response to a joint request from the House Committee on Interior and Insular Affairs, Subcommittee on National Parks and Public Lands, and the House Committee on Science, Space, and Technology, the Advisory Council on Historic Preservation undertook an analysis of preservation issues concerning Federal support for highly scientific and technical facilities. The analysis considered the appropriate role of historic preservation in decisionmaking about the operation and management of these facilities.

When future generations reflect upon the most significant historic resources of the late 20th century, the sites associated with man's first ventures into space, the splitting of the atom, the development of computers and artificial intelligence, and the first successful products of genetic engineering may well be the first examples that spring to mind. America's scientific and technical facilities stand as monuments to the Nation's supreme ability to invent and exploit new technology and to advance scientific and engineering knowledge. Some facilities and structures significant in the early history of science and technology are now inactive or have been deemed obsolete; they are in danger of being lost to future generations through lack of adequate maintenance or complete neglect.

This analysis responds to concerns on the part of the scientific community that efforts to preserve or protect historic scientific and technological resources through compliance with Federal historic preservation law might impede efforts to stay at the forefront of international research and achievement. Many of the facilities and much of the equipment associated with scientific or engineering advancements remain in active use today, but need to be continuously upgraded and modified to stay at the cutting edge of technology. Managers and scientists fear that excessive delays, costs, or the modification or "veto" of plans for new technological facilities would inevitably result from compliance with the National Historic Preservation Act (NHPA). In addition, private institutions receiving Federal support through research grants have pointed out that such compliance would impose a burden on them to bear these monetary and other costs as a condition for receiving research funds.

Given the late-20th-century's pattern of rapid technological change, however, the protection of the physical environment that facilitated that change takes on increased importance. Federal agencies managing or assisting scientific research have a leadership role in the stewardship of historic properties under NHPA. They are obligated to present and future generations, whose tax dollars will continue to fund their operations, to consider the effects of their actions on the historic values embodied in select facilities.

The central issue discussed in this report is how organizations whose primary missions involve active research and highly technical operations can meet their obligations as stewards of the Nation's historic scientific resources, given their continuous need to modify or replace "historic" facilities and equipment. What is the appropriate balance between an agency's primary scientific and technical mission and historic preservation? How can this balance be achieved effectively and efficiently, and how can attendant costs be minimized?

The number of properties formally recognized as significant for historic scientific and technological achievements currently is fairly small. The vast majority of scientific research activities is unlikely to affect historic properties through destroying or altering their historic characteristics. Most Federal funding is used for purchasing equipment and computer time and paying staff salaries. A small minority of such activities, however, does have the potential to affect historic properties. Certainly long-term operation and management of active facilities can result in significant alterations. Further, the number of historically significant scientific properties is likely to increase in the near future as the era of World War II and its aftermath recede further into the past.

The findings and recommendations contained in this report are based on field visits to numerous affected facilities, as well as meetings with scientists, engineers, historians, facility managers, museum curators, and preservation professionals; solicitation of public comments; review of past Section 106 cases and existing agency programs; and review of National Park Service research for the preparation of two relevant National Historic Landmark theme studies.

The analysis finds in brief that:

- The assumption that the NHPA is fine for the majority of Federal activities, but inappropriate for scientific research and development must be rejected. Other Federal programs meeting national priorities must take into account historic preservation, just as they must minimize natural environmental degradation and ensure equal employment opportunity. There is validity, however, to the view that because of the nature of the scientific research process, a special effort should be made toward maintaining flexibility in the planning and execution of research work and meeting the time constraints of priority programs.
- Federal agencies engaged in scientific research should better acknowledge and meet their obligations as stewards of the national scientific heritage and strengthen their commitment to the preservation of that legacy.
- The historic preservation community has characteristically displayed unfamiliarity with the technical characteristics of historically significant properties of a scientific or technical nature, and the needs of active scientific research and engineering.
- The scientific community has typically displayed unfamiliarity with the requirements of NHPA and the interests of the historic preservation community.
- With better communication, education, and cooperation among all parties, and with some clear understandings on funding and time constraints facing all parties, the Council's regulations and the Section 106 review process are flexible enough to accommodate the needs of both scientific research and technology operations and historic preservation.

Highlights of the Recommendations

- Congress should reaffirm the national commitment to historic preservation by upholding the existing national historic preservation program and rejecting individual program or project requests for legislative exemptions from and waivers of historic preservation statutes. Such statutory exemptions and waivers are inconsistent with sound management of our Nation's historic resources, and the national historic preservation program currently provides sufficient flexibility for dealing with individual agency and facility needs.
- Future scientific achievement, as well as an adequate serving of the public interest, depends on an understanding of past scientific successes and failures. To the extent that they do not already, future authorizations for major scientific and technological programs should include public education components focusing in part on the communication of the relevant history of science.
- Decisions about projects that may affect historic properties need to be made with as complete an understanding as possible of such effects. However, considerations of preservation options should be kept distinct from the peer review process of awarding research grants and the determination of research priorities central to the scientific research process.
- The Advisory Council on Historic Preservation should take the lead in working with affected Federal agencies in developing and jointly subscribing to a statement of policy that acknowledges the sensitive relationship between the progress of scientific research and the evolving history of science and its physical manifestations.

- Over the next two years, affected Federal agencies, in cooperation with the Advisory Council on Historic Preservation, should examine current administrative procedures for historic preservation. This should include evaluating existing mechanisms for meeting responsibilities for NHLs and other properties eligible for or listed on the National Register of Historic Places. As part of this process, affected Federal agencies should determine how they might better coordinate historic preservation programs and planning among facilities managers, public affairs offices, archivists, historians, external affairs offices, and other staff. The Council should recommend measures to these agencies to improve the effectiveness, consistency, and coordination of those procedures with the purposes of NHPA as prescribed by Section 202(a)(6).

- Innovative ways for minimizing and meeting the costs of historic preservation that may be associated with the operation and management of historic facilities must be explored by Federal agencies, in cooperation with other concerned parties.

- The Advisory Council on Historic Preservation, in cooperation with the Smithsonian Institution and NPS, should foster better communication between the preservation and museum communities and Federal agencies, with the aim of establishing a consensus about what kinds of facilities and objects should be physically preserved for the future. This would include deciding how the historic value of facilities and objects should be determined, and which of these could be "preserved" through documentation. Most probably that option would be best suited to historic facilities that remain active today.

Preservation Resources

Sources of Clay Roofing Tiles for Historic Buildings

Clay roofing tiles were used at least as early as the mid-17th century in America. Archeological research has revealed that pan tiles, or S-curved tiles, and flat tiles were used in Jamestown, Virginia. Clay tile roofs were common in large urban areas such as New York and Boston in the late-18th century, and throughout the 18th century because of their fireproof qualities. Initially imported by European settlers, often as ship ballast, the colonists soon established their own production of a variety of clay roofing tiles here in the New World. By the mid-17th century, Dutch settlers in the Hudson Valley were manufacturing clay roofing tiles for their own use, as well as transporting them down the river to New York. A century later Moravian settlers in Pennsylvania were also making their own clay roofing tiles that resembled the clay tiles of their German homeland. Spanish missionaries brought with them their tradition of clay tile roofs when they settled on the West Coast and established the string of missions that are the buildings in America still most commonly associated with clay tile roofs. Clay tiles of varying shapes and design continued to be a predominant roofing material in America until about 1820 when their popularity began to be eclipsed by the increasing use of metal roofing materials which were not only fireproof, but available at a fraction of the cost and weight of clay tiles. Although the Italianate Villa styles of the 1850s were successful in reviving America's interest in clay roofing tiles for a brief period, it was the introduction in the late-19th century, and the early-20th century, of the many romantic revival styles of architecture, most notably the Romanesque, Mission, Spanish and Mediterranean revival styles, that was really responsible for repopularizing clay tile roofs in the United States. It is the historic clay tile roofs of buildings from this period that are most likely to be candidates for repair and replacement, and it is primarily for the owners and managers of these turn-of-the-century buildings that this list has been prepared.

The companies listed here manufacture or supply new clay roofing tiles that can be used in historic preservation and rehabilitation projects. In addition, some of the companies supply custom-made tiles, and others offer a large and varied stock of salvaged clay tiles. The entry for each company lists the different "field" tile shapes available from that company, or a selection of the most popular or historically appropriate of the company's "field" tiles. General specifications given include size and weight, number of colors available, and approximate cost per square, whenever possible. Since prices are subject to change, it is best to contact the manufacturer or supplier directly for a list of current prices, or to discuss custom orders. The companies listed here also supply all the specially-shaped tile pieces, such as gable, hip, and ridge fittings, end bands, eave closures, and hip and terminal starters, to name just a few, that are necessary to accommodate the wide variety of roof shapes and sizes, as well as special hangers when required. It should be noted that not all of the tiles supplied by these companies may be suitable for repair or replacement of historic tile roofs. Some of the tile shapes, and many of the colors, particularly those that are very bright or shiny, are completely contemporary in design, and some, such as those manufactured in Japan, are Oriental in design, and are not appropriate for use on most historic tile roofs in the U.S. (A more complete listing of available sources for traditional roofing materials that includes not only clay tiles, but also slate, metal, concrete and composition tiles and slates, may be found in *Traditional Building*, Vol. 2, No. 6, November-December 1989.)

This list was compiled by Paul K. Williams, graduate student in the historic preservation program at Cornell University, during his internship with the Preservation Assistance Division (PAD) during the summer of 1990. It was compiled as part of a research effort directed toward development of a Preservation Brief on the subject of the Preservation and Repair of Historic Clay Tile Roofs that will be published by the Preservation Assistance Division. Anne Grimmer, architectural historian with PAD, will continue to work on preparation of the Brief. She welcomes any information on the subject concerning historical treatments, or repair and replacement techniques that have been used successfully on historic clay tile roofs. Please contact her at FTS 202-343-9567.

New Programmatic Agreement on Compliance with Section 106

We now have a new Servicewide Programmatic Agreement (PA) for compliance with Section 106 of the National Historic Preservation Act. Discussions among NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers reached a successful conclusion on August 15, 1990, when the heads of all three organizations signed this agreement. In some ways, the new PA retains elements of NPS compliance practice. In other areas, it will change the way we do our Section 106 business. It replaces the former Servicewide Programmatic Memorandum of Agreement of 1979, and the 1981 amendments to that PMOA.

In our negotiations, primary goals for the new PA were:

- to establish clear points of coordination between the NPS planning process and Section 106 procedures; and especially to eliminate confusion, at the end of a General Management Plan (GMP) or Development Concept Plan (DCP) process, about which undertakings in that plan have been adequately reviewed for Section 106 purposes and which require further review;
- to improve communications among SHPO and NPS offices about how we are carrying out programs related to Sections 106 and 110 of the National Historic Preservation Act;
- to reflect and reaffirm the NPS leadership in cultural resource preservation among Federal agencies; and
- to focus SHPO-NPS 106 consultations more on undertakings that are potentially harmful to cultural resources, reducing the need for discussions with SHPOs about specified kinds of relatively routinized activities that can be well handled under existing policies, guidelines, and management processes.

Here is a quick summary of the main provisions of the Programmatic Agreement.

- Specified activities (called "programmatic exclusions" in the PA) are reviewed within NPS only, so long as they meet relevant preservation guidelines and standards, are reviewed through the "XXX" form process, and are found by NPS to have no adverse effect on cultural resources based on the criteria in the Advisory Council's regulations (36 CFR Part 800.9)
- The XXX form process remains a key part of our compliance documentation, although the form itself is being revised to reflect the new PA's provisions. Regional review of XXX forms will continue as under the old PMOA, and regional directors retain their responsibilities for ensuring that Section 106 consultation is carried out.
- When a GMP or DCP is scheduled for preparation or revision, we will request SHPO and Advisory Council comment on preservation concerns. If we have sufficient information about affected resources and the effects of proposed projects, we may conduct 106 consultation on specific undertakings in the context of the plan review process. The standard procedures in the Advisory Council's regulations will apply. The approved plan will include an outline of undertakings that require further 106 consultation and those adequately reviewed during the planning process.
- The PA calls for periodic regional office-SHPO meetings and other communication and coordination between NPS and SHPOs. It emphasizes mutual sharing of baseline data on cultural resources.

This means that, compared to the old PMOA arrangements, this PA will involve increased coordination with SHPOs on undertakings in GMPs and DCPs. Both during the planning process, and in follow-up review of actions that require further consultation, there will be a need for more attention to standard Section 106 procedures. On the other hand, for certain specified and significant groups of undertakings (the "programmatic exclusions"), consultation with SHPOs will be reduced.

What do we gain from this change? We hope that this new PA will result in improved communication and coordination between the Advisory Council, SHPOs, and NPS on policies and procedures related to 106 responsibilities. For NPS managers, it will clarify those responsibilities and eliminate some misunderstandings that have developed with some SHPOs about our planning process. We also hope that the PA provides a flexible framework for coordinating our planning processes with Section 106 review.

Why was a new PA negotiated? What was the problem with the old PMOA? We entered these negotiations because the Advisory Council staff and NCSHPO raised concerns about the old PMOA arrangements. To briefly summarize their concerns:

a. NPS General Management Plans, which played a major role in 106 consultation under the 1979-1981 PMOA, were not providing the kinds of opportunities for consultation about individual undertakings envisioned under the Advisory Council's regulations for 106 compliance. GMPs, in many cases, include broad, conceptual treatment of preservation issues and projects that will affect cultural resources. They do not in all cases include specifics about the key points in the 106 process: evaluating historic properties using the National Register criteria, determining the effects of undertakings on Register-eligible cultural resources, and considering ways to mitigate adverse effects.

In addition, the SHPOs and Advisory Council often found it difficult to participate in the NPS planning process because of funding and staffing limits. As a result, and because the PMOA reduced the necessity for formal consultation on undertakings in NPS plans, SHPOs were often not clear about what NPS considered to be cleared for Section 106 purposes under a given plan.

b. Advisory Council staff perceived that some NPS plans emphasized resources related to legislative mandates or primary park interpretive themes to a degree that overshadowed responsibilities to all National Register properties, especially those significant at local or state levels.

c. Some questions about consistency in interpretation of the PMOA and preservation standards were also raised. Specifically mentioned were variations in interpreting the definition of preservation maintenance.

What's next? We are developing guidance on how to interpret and implement the PA, and a new XXX form. As of now, we also expect to conduct a workshop on 106 compliance and the new PA this spring for regional compliance specialists. If you have comments or want more information, please contact Laura Feller in the WASO History Division (FTS 343-8167).

—Laura Feller
Historian
History Division, NPS

Capitol Contact

Bruce Craig

. National Heritage Conservation Act Tops Agenda for Preservationists

Last Congress, Senator Dale Bumpers, Chairman of the Senate Energy and Natural Resources Committee on Public Lands, National Parks and Forests, introduced the National Heritage Conservation Act and predicted action on the legislation in the 102nd Congress. Since the bill's introduction, the historic preservation and environmental community has been hard at work submitting comments on the proposed bill to Senator Bumpers as well as to Congressman Bruce Vento who chairs the House Interior and Insular Affairs Committee's Subcommittee on National Parks and Public Lands. Vento is also expected to introduce his own version of a Heritage Conservation Act early in the session. For the first time in recent memory, both committee chairs of powerful House and Senate committees seem willing and eager to address the park protection issue.

The proposed National Heritage Conservation Act is a response to the legislative taking which occurred in the vicinity of the Manassas battlefield a few years ago. Due to fiscal and philosophical considerations, neither Congress nor the Administration would like to see another such "taking" occur. Consequently, the Heritage Conservation Act was crafted as an alternative approach to the problem of heritage protection. If enacted, the proposed legislation would create new reporting requirements and establish a planning process for a group of resources classified as "heritage resources" which includes units of the National Park System, National Historic Landmarks, National Natural Landmarks and other places deemed by state governors as areas deserving maximum protection.

Key provisions of the bill as proposed by the National Heritage Coalition, a group of historic preservation, conservation and veteran organizations which will work toward enactment of the legislation this year, include a requirement that the National Park Service biannually prepare a State of the National Parks report which would document the extent of the threats that these heritage resources face. A list of endangered National Landmarks would also be established and the National Park Service would be empowered to work with local governments and private owners to devise voluntary strategies to protect these resources. For example, grant monies would also be authorized for the states and local governments to achieve this protection objective. The Act would also create a new standard to limit Federal actions that could demonstrably harm national park units and other significant heritage resources.

Though the Act is expected to garner strong bi-partisan support from members of Congress, the measure may meet stiff opposition from a number of western congressmen, the National Inholders Association and other owner land rights organizations.

Blair Mountain National Monument?

On February 21, 1991, Congressman Nick J. Rahall, Chairman of the House Subcommittee on Mining and Natural Resources, conducted an oversight hearing on the historic preservation requirements of the Surface Mining Act which includes provisions to prohibit, in certain instances, surface coal operations that would adversely affect places included on the National Register of Historic Places. The focus of attention was a mining permit application by the Aracoma Coal Company Inc., to strip-mine a "battlefield" on Blair Mountain located in Logan County West Virginia. The battlefield is currently not listed on the National Register. Here, in 1921, an army of 10,000 coal miners took up arms and reportedly threatened to overthrow the governments of two counties in West Virginia. A division of U.S. Army troops put down the rebellion. Some 500 miners were later charged with treason against the state.

In an effort to preserve the battlefield, the United Mine Workers of America and several local preservation groups have proposed to establish the Blair Mountain Battlefield National Monument "to honor the coal miners who sought to bring freedom and the union to Southern West Virginia. " Legislation has yet to be introduced to establish the monument, although bills have been introduced in both the House and Senate to have the National Park Service conduct a labor history national landmark theme study. The theme study would assess the Blair Mountain site in context with other areas significant in the history of the American labor movement.

If you would like additional information on any of the above, drop me a note at National Parks and Conservation Association, 1015 31st Street NW, Washington, DC 20007.

NPS/NPI Agreement

On January 30, 1991 James Biddle Chairman of the Board of the National Preservation Institute (NPI) and former President of the National Trust for Historic Preservation, signed a "Cooperative Agreement" between the National Park Service and the Institute. A non-profit organization, the NPI was created in 1980 to provide short training programs in historic preservation for nonprofessionals and for professionals who need "cross-disciplinary" training opportunities.

The Agreement—drafted in the office of the NPS Associate Director for Cultural Resources specifically to assist NPS with employee development in cultural resource management—provides opportunities for future projects "that support training in the conservation, protection, and documentation of national and international heritage sites. " It could be used effectively to support the Department of the Interior in its Congressionally-mandated responsibilities to assist Federal, state, and local agencies in the preservation of historic properties.

For additional information, or for copies of the Agreement, contact Dr. John Poppeliers, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; 202-343-7069.

Long-Term Plan

The second annual "National Park Service Long-Term Plan for Information Resources Management (IRM), 1991-1995," was completed in January. The IRM Plan documents the major components of IRM in the Federal sector: automated data processing, telecommunications, records management, and library and information resource activities. The primary goal of the first long-term IRM Plan was to facilitate communication by ensuring that all units have access to a document that tells them what other offices are doing with information systems. The second IRM

Plan contains updated information on accomplishments, initiatives, system development projects, and IRM budget strategies. One portion presents the second in a series of special IRM reports—the survey of NPS libraries (see feature article, this issue). As the NPS conducts its IRM strategic planning on a prescribed five-year cycle, each year the plan will contain a special report on a different aspect of the NPS IRM environment. Next year, a survey is being conducted on federally funded information resource investments in associated functions, such as the NPS Cooperative Park Study Units and Cooperating Associations. At the end of the five-year cycle, the plan will have documented for the first time a complete description of the Service's IRM investments. Copies of the plan have been distributed to all parks, regions, centers, and WASO Division. The plan also includes reports on the following activities.

Telecommunications

Telecommunications work is currently taking place on two major fronts. The first is implementing conversion from the current FTS telephone system to the new **FTS 2000**. FTS 2000 is the Federal Government's state-of-the-art system that offers both basic and advanced telecommunications, including voice and data transmission, electronic mail, and video teleconferencing services. The FTS 2000 contract promises service to every domestic Federal site, which will reduce costs and greatly improve service to NPS staff and visitors alike. The transition of existing FTS locations is currently taking place; this includes about 25% of NPS locations. NPS has funds budgeted in FY92 to help the remaining 75% of remote NPS locations that do not have the old FTS service to convert to FTS 2000.

The second major telecommunications initiative in 1991 is the implementation of **ParkNet**, which received FY91 funding.

The ParkNet project is an effort designed to provide standard communication capabilities among the regional offices WASO, and the major NPS data centers. Another goal of the project is to reduce the telecommunications complexities for end users, especially at the smaller parks, who must currently learn up to five different communications protocols for signing on to five mainframe systems. The first of five implementation phases currently ongoing is the design and installation of an NPS "backbone" network that connects the FTS 2000 services and equipment needed to link the NPS regions to the NPS computer and data centers.

Civil War Soldiers System

The American Battlefield Protection Program (ABPP), initiated in 1990, is a major initiative of the Secretary of the Interior to develop partnerships with Federal, state, regional and local officials and private conservation organizations to develop protection alternatives for threatened battlefields and related sites (see *CRM Bulletin*, Vol. 13, No. 5). The Civil War Soldiers System is currently being designed in conjunction with the ABPP and is a high priority project for 1991. This system will allow park visitors, interpreters, historians, and the public to search and retrieve information on any of the approximately 3.5 million soldiers who served during the Civil War. The system development proposal

also includes future database access for libraries and schools and development of subsets of the data for distribution to schools for educational purposes. More about this system will be published in *CRM* as the system takes shape.

The Preservation Law Collection at the University of Virginia Law Library, that includes government studies, litigation files, and historic district ordinances and guidelines, is now available through an on-line database. For information, phone the Law Library in Charlottesville, Virginia, at 804-924-3384.